



Memo

date: May 2, 2007

to: Distribution

from: R. Savage / M. VanEssendelft

R. Savage / M. VanEssendelft

Subject: Collider –Accelerator Division / Superconducting Magnet Division
Environmental Management System (EMS)
and
Occupational Health and Safety Management System (OHSAS)
Readiness Assessment
(QA 2007-215)

This internal readiness assessment was conducted to determine whether the Collider-Accelerator Department (C-AD) and the Superconducting Magnet Division (SMD) Environmental Management System (EMS) (which has been implemented for eight years) and their Occupational Health and Safety Management System (OH&S) Programs (implemented for four years) are being implemented in accordance with Environmental Management System 14001- 2004 and Occupational, Health and Safety Management System OHSAS 18001 – 1999 Standards. To accomplish this task the assessment focused on reviewing EMS/OH&S elements for compliance and effectiveness in meeting the EMS and OH&S Policy and Objectives within their operating processes. In addition, EMS/OHSAS record maintenance controls were also reviewed. This appraisal was performed on April 18 through April 30, 2007. A completed assessment checklist, containing criteria is available upon request. Personnel interviewed during this assessment were P. Ciriigliaro, F. Cullen, M. Heimerle, R. Karol, D. Lederle, E. Lessard, J. Maraviglia, D. Passarello, C. Porretto, J. Scott and A. Warkentien.

Based on interviews conducted and documents reviewed, the C-A/SMD EMS and OH&S Management System written programs are being implemented in accordance with the SBMS Procedures Subject Area requirements. The EMS and OH&S programs are integrated into everyday work activities through Operating Procedures and Work Planning and Control Processes with the exception of one observation that affects both EMS and OHSAS program process.

As identified in 2006, employee representatives from C-AD and SMD who have been appointed to the Worker Occupational Safety and Health (WOSH) Committee have participated throughout the year with ensuring worker concerns, ideas and inputs related to OH&S and EMS topics are received, reviewed and responded to by either the Committee or Upper Management. In addition, group supervisor's and manager's participate in weekly safety meetings to discuss topics such as EMS/OH&S objectives, human performance, Code regulations, and on-going related issues to Staff.

Observation 1: (EMS/OHSAS Element 4.3.3) Objectives and Targets states that the organization shall establish, evaluate and maintain documented environmental/occupational health and safety objectives, at each relevant function and level within the organization. Contrary to this requirement it was discovered that the C-AD FY 2007 Self-Assessment Report which identifies an evaluation of the objectives and measures has not been issued as required.

Responsible Individual: D. Passarello

Due Date: 5/7/07

Approved:

R. Karol, C-AD ESHQ Division Head

On File

E. Lessard, C-AD ESHQ, Chair

On File

D. Lowenstein, Collider-Accelerator Department Chairman

On File

P. Wanderer, Superconducting Magnet Division Head

On File

Cc:

R. Karol

E. Lessard

D. Lowenstein

P. Wanderer

Attachments EMS / OHSAS - Checklist

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		GENERAL REQUIREMENTS	
ELEMENT:	4.1	TITLE:	General Requirements
ISO 14001 STANDARD:		NO	PARTIAL
The organization shall establish, document, implement and maintain an EMS in accordance with the requirements of this International Standard and determine how it will fulfill these requirements.			X
The organization shall define and document the scope of its EMS.			X
FACILITY IMPLEMENTATION OF STANDARD: The Collider-Accelerator Department (C-AD) and Superconducting Magnet Division (SMD) Environmental Management System (EMS) system has been established and implemented for almost eight years. It is modeled around the Lab-wide SBMS subject areas and supplemented with Internal Operating Procedures. (Note: Presently, the internal operating procedures are being converted over to SBMS Subject Area documents) The C-A/SMD OPM 1.10.2, Environmental Management Program Description, with associated attachments describes the program and points to related procedures and individuals responsible for carrying out EMS tasks (including researchers and contractors) within both areas.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST): 1.10.2 Environmental Management Program Description Collider-Accelerator Department and Superconducting Magnet Division			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS: Has a program been established? How long has the program been established? Is it fully implemented? Does it apply to persons work for or on its behalf? (e.g., students, contractors, etc.) Is it effective? Is the program meeting the intent of ISO 14001? Is it being maintained the requirements of International Standard ISO 14001:2004? Have they defined and documented the scope of the EMS (noting exclusions)? Does the scope cover products and services (including R&D)?			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		ENVIRONMENTAL POLICY	
ELEMENT:	4.2	TITLE:	Environmental Policy
ISO 14001 STANDARD:		NO	PARTIAL
Top Management shall define the organization's environmental policy and ensure that, within the defined scope of the EMS, it: <ul style="list-style-type: none"> a) is appropriate to the nature, scale and environmental impacts of its activities, products, or services; b) includes a commitment to continual improvement and prevention of pollution; c) includes a commitment to comply with applicable legal requirements and with other requirements to which the organization subscribes which relate to its environmental aspects; d) provides the framework for setting and reviewing environmental objectives and targets; e) is documented, implemented, maintained f) is communicated to all persons working for or on behalf of the organization; g) is available to the public. 			X
FACILITY IMPLEMENTATION OF STANDARD:			
The Laboratory Environmental, Safety, Security and Health Policy plaques are posted in the chairman's/Managers offices and in the lobby of Building 902 and 911. Employee awareness of this policy was not reviewed due to upcoming scheduled forums and awareness initiatives. The EMS Policy is also addressed in the BNL Bulletin and Monday Morning Memo from the BNL Director. Based on past audit reviews of this element employees were found knowledgeable of requirements. In addition, C-AD is presently assisting the Laboratory by converting the BNL EMS Interim Procedures into SBMS Subject Area documents.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM 1.10 – C-A Environmental, Safety and Health Policy, OPM 1.10.2 – C-AD/SMD Environmental Management Program Description			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
Is the policy defined and is it appropriate to the type, size, and environmental impacts of the activities?			
Is the policy aligned with the scope of the EMS?			
Has it been endorsed by top management?			
Does the policy include a commitment to continual improvement and evidence of such in the organization's operations?			
Does the policy include a commitment to pollution prevention and evidence of such in the organization's operations?			
Does the policy include a commitment to compliance to legal requirements and is there evidence indicating intent to comply?			
Does the organization subscribe to other requirements, and are they covered also?			
Does the policy include a mechanism for setting and reviewing environmental objectives and targets?			
Is the policy documented, implemented, maintained?			
Is the policy communicated to all persons working for or on behalf of the organization?			
Do persons working for or on behalf of the organization exhibit knowledge of environmental policy (key commitments and how they relate to job)			
Is the policy available to the public?			

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ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		PLANNING	
ELEMENT:	4.3.1	TITLE:	Environmental Aspects
ISO 14001 STANDARD:			
<p>The organization shall establish, implement and maintain a procedure(s)</p> <p>a) to identify the environmental aspects of its activities, products, or services within the defined scope of its EMS that it can control and those it can influence taking into account planned or new developments, or new or modified activities, products or services, and</p> <p>b) to determine those aspects that have or can have significant impacts on the environment (i.e., significant environmental aspects).</p> <p>The organization shall ensure that the significant environmental aspects are taken into account in establishing, implementing and maintaining its EMS.</p> <p>The organization shall document this information and keep it up-to-date.</p>		NO	PARTIAL
			YES X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The mechanism used to document Significant Aspects is the SBMS Subjects Area, Identification of Significant Environmental Aspects and Impacts. The C-AD/SMD identifies environmental aspects during the planning phase of its operations using the Work Planning Systems, and Safety Review Systems. The work planning system has a section that addresses EMS for work done by C-A/SMD employees, BNL employees performing work in the C-A/SMD facilities as well as external contractors performing work within the facilities. C-A and SMD has an EMS team which reviews the existing significant aspects on an annual basis.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM 2.28, C-A Procedure For Enhanced Work Planning</p> <p>OPM 2.29, C-A Procedure For Enhanced Work Planning For Experimenters</p> <p>OPM 2.12, SMD Work Planning and Controls</p> <p>OPM 1.10.2, C-AD/SMD Environmental Management Program Description</p> <p>EMS Task List 2006/2007</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Is there a documented and maintained procedure to review and update aspects? When was the last time they were reviewed?</p> <p>Are aspects documented?</p> <p>What mechanism is used to initiate aspect review/revision when operations, products or services change?</p> <p>How do they identify aspects for PLANNED activities?</p> <p>Is it clear that significant aspects were taken into account in developing and implementing the EMS?</p> <p>Are there records showing that an analysis to select significant aspects was done?</p> <p>Was there effort to include aspects over which there is influence?</p> <p>Are there any obvious aspects which should have been considered and were not? If not, why not?</p>			

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ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		PLANNING	
ELEMENT:	4.3.2	TITLE:	Legal and Other Requirements
ISO 14001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain a procedure</p> <p>a) to identify and have access to applicable legal and other requirements to which the organization subscribes related to its environmental aspects, and</p> <p>b) To determine how these requirements apply to its environmental aspects,</p> <p>The organization shall ensure that these applicable legal requirements and other requirements to which the organization subscribes are taken into account in establishing, implementing and maintaining its EMS.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>As identified in 2006, legal requirements come from external agencies to Laboratory level personnel. These requirements are communicated through the generation of subject areas. Cognizant C-AD and SMD personnel have subscribed to the SBMS subscription Service that notifies users of new and updated subject areas. The assigned ECR for C-AD and SMD also, as part of his job function, makes sure that both C-AD and SMD facilities is made aware of new requirements and works to assure department compliance to these requirements. The C-A/SMD EMP list legal & other requirements as applicable. The ECR ensures the incorporation of new requirements as a member of the ASSRC and ESRC and through incorporation of new requirements into the process assessments.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM 1.10.2</p> <p>C-A/SMD Environmental Management Procedures (EMP)</p> <p>SBMS Subject Area</p> <p>Subscribe to SBMS subscription service</p> <p>C-A ECR and SBMS Subject Matter Experts</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Is there a documented procedure for the organization to identify and have access to all applicable legal requirements?</p> <p>Does it include federal, state and local requirements (including those applicable to remote locations), including regulations, permits, and agreements, and ISO 14001:2004?</p> <p>Is someone (or more than one) designated to keep unit current on requirements?</p> <p>What are that persons resources, references, methods to keep current?</p> <p>How is applicability of new requirements determined?</p> <p>How affected employees are made aware of new requirements?</p> <p>How have they determined how these requirements apply to the environmental aspects?</p> <p>How can they demonstrate that they have taken legal requirements into account when setting up the EMS?</p>			

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Organization: C-AD/SMD

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Environmental Management System Model		PLANNING	
ELEMENT:	4.3.3	TITLE:	Objectives, Targets, and Programmes
ISO 14001 STANDARD:			
		NO	PARTIAL
		YES	
<p>The organization shall establish, implement and maintain documented environmental objectives and targets, at relevant functions and levels within the organization.</p> <p>The objectives and targets shall be measurable, where practicable, and consistent with the environmental policy, including the commitments to prevention of pollution, to compliance with applicable legal and other requirements to which the organization subscribes, and to continual improvement.</p> <p>When establishing and reviewing its objectives and targets, an organization shall take into account the legal requirements and other requirements to which it subscribes, and its significant environmental aspects. It shall also consider its technological options, its financial, operational and business requirements, and the views of interested parties.</p> <p>The organization shall establish, implement and maintain (a) programme(s) for achieving its objectives and targets. Programme(s) shall include:</p> <p>a) designation of responsibility for achieving objectives and targets at relevant functions and levels of the organization;</p> <p>b) the means and time-frame by which they are to be achieved.</p>		X	
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Observation: Objectives, Targets and Programmes are establish, documented and maintained as identified in OPM 14.1, Environmental Management Program for Collider-Accelerator Department and Superconducting Magnet Division at each relevant function and level within the organizations. This year, employee interface (via. WOSH Committee Members) was requested to review this year's (2007) EMS Targets and Objectives that represent meaningful environment goals. The reason for this review is to comply with the 10CFR851 requirement for worker participation in establishing Environmental, Health and Safety goals. Based on this review and feedback C-AD Management enhanced their Targets and Objectives for 2007. However, on March 15, 2007 OPM 14.1, Environmental Management Program for C-AD and SMD was revised and issued. Due to the date of issuance of this OPM, the C-AD FY 2007 Self-Assessment Report which identifies an evaluation of the objectives and measures has not been issued as required. Based on discussion with the author of the 2007 Self-Assessment Report it is scheduled for issuance during the first week of May 2007.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>Environmental Management Program Forms</p> <p>Identification of Significant Environmental Aspects and Impacts</p> <p>C-A/SMD Department Environmental Management Matrix of Objectives and Targets for Significant Aspects</p> <p>BNL FY07 Critical Outcomes & Performance Measures, OPM 1.10.2, OPM 14.1</p>			
COMMENTS: None			
EVALUATION:			
MEETS REQUIREMENT (See Observation Above)		MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Has the organization established and maintained objectives and targets for at least some significant aspects?</p> <p>Have the documented objectives and targets taken into account legal and other requirements?</p> <p>Are there programs to achieve all the identified objectives and targets? Do the targets support achievement of the objectives?</p> <p>Are objectives and targets reasonable and measurable?</p> <p>Is there a documented and maintained procedure for periodically reviewing objectives and targets?</p>			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.1	TITLE:	Resources, Roles, Responsibility and Authority
ISO 14001 STANDARD:			
Management shall ensure the availability of resources essential to establish, implement, maintain and improve the EMS. Resources include human resources and specialized skills, organizational infrastructure, technology and financial resources.		NO	PARTIAL
Roles, responsibility and authority shall be defined, documented and communicated in order to facilitate effective environmental management.			
The organization's top management shall appoint a specific management representative(s) who, irrespective of other responsibilities, shall have defined roles, responsibilities and authority for			
a) ensuring that an EMS is established, implemented and maintained in accordance with this International Standard; b) reporting to top management on the performance of the EMS for review, including recommendations for improvement.			
FACILITY IMPLEMENTATION OF STANDARD: Management has committed the appropriate resources and is accountable for those actions during the monthly Department's meetings and the respective annual Management Reviews, in addition to the weekly meetings scheduled that culminate in the C-A/SMD. General and/or specific EMS responsibilities are documented on departmental personnel's' R2A2. An EMS "core" team works within the department to assure implementation of the C-A/SMD EMS. Note: During this audit a sample of R2A2's for new employees was performed to ensure these records were in-place as required. It was revealed that all R2A2's were current and maintained as required.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
R2A2's (Top Management, C-A/SMD EMS representative and EMS team)			
OPM 1.10			
OPM 1.10.2			
SMD – OPM 2.2			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT		MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Are roles and responsibility, and authorities defined, documented and communicated?			
Do employees (e.g., management rep) know their roles, authorities and responsibilities?			
Has management ensured the availability of necessary resources (people, technology organizational infrastructure , money) to accomplish objectives and targets?			
Has top management appointed an environmental management representative?			
Has the top management rep giving management recommendations for improvement?			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.2	TITLE:	Competence, Training and Awareness
ISO 14001 STANDARD:		NO	PARTIAL
<p>The organization shall ensure that any person(s) performing tasks for it or on its behalf that have the potential to cause a significant environmental impact(s) identified by the organization is (are) competent on the basis of appropriate education, training or experience, and shall retain associated records.</p> <p>The organization shall identify training needs associated with its environmental aspects and its EMS. It shall provide training or take other action to meet these needs, and shall retain associated records.</p> <p>The organization shall establish, implement and maintain a procedure(s) to persons working for it or on its behalf aware of</p> <ul style="list-style-type: none"> a) the importance of conformity with the environmental policy and procedures and with the requirements of the EMS; b) the significant environmental impacts and related actual or potential impacts associated with their work, and the environmental benefits of improved personal performance; c) their roles and responsibilities in achieving conformity with the requirements of the EMS, and d) the potential consequences of departure from specified operating procedures. 			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The C-AD/SMD has developed job specific training for each of the process evaluations. This training deals with each one of the items (a-d) listed above. The Job Training Assessment (JTA) specifies if this training is a requirement for an employee to perform their job. In addition, the present training is at 99% complete, even after adding numerous safety courses to respective JTAs. C-A/SMD also recently scheduled their EMS awareness forums with those individuals whose work has a potential to impact the environment.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM 1.12, C-A JTAs, BTMS, C-A/SMD EMS job specific training procedures, SMD – OPM 2.1			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Have training needs been identified for those (including those who work ON BEHALF of the organization – e.g., contractors, temporary workers, visiting scientists/students, home-based staff) whose work can have a significant impact on the environment?</p> <p>Does training need identification consider environmental aspects?</p> <p>Has the appropriate training been done and, where required, by qualified trainers?</p> <p>Are procedures established and maintained to make persons work for or on its behalf aware of a – d above?</p> <p>What portion of employees have received required awareness training?</p> <p>Are there specific, documented minimum requirements for each person performing a task that can cause significant environmental impact?</p> <p>Are persons working for or on behalf of the organization aware of: environmental aspects of personal tasks (how job can impact environment)</p>			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.3	TITLE:	Communication
ISO 14001 STANDARD:			
NO		PARTIAL	YES
<p>With regard to its environmental aspects and EMS, the organization shall establish, implement and maintain a procedure(s) for:</p> <p>a) internal communication between the various levels and functions of the organization;</p> <p>b) receiving, documenting and responding to relevant communication from external interested parties.</p> <p>The organization shall decide whether to externally communicate about its significant environmental aspects, and shall document its decision.</p> <p>If the decision is to communicate, the organization shall establish and implement a method(s) for this external communication.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>As identified in 2006, internal communication is performed through various means but much of this is grounded in the work planning process, which follows planned weekly meetings throughout the departments. It is at these meetings where relevant information regarding EMS and information specific to a particular job or process is communicated. Additionally, internal communications come in the form of formal memos, e-mail, newsletters, monthly/weekly Group meetings, SBMS Subscription Service, TIER I process, ATS notifications, tool box meetings and web postings. External communications are channeled through the BNL public affairs (CIGPA), DOE and other community action committees are documented through the CCTS where applicable.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPMs 2.12, 1.10.2, 1.10.2.c and 1.10.3 C-A/SMD Web site, C-A/SMD newsletter, CAC meetings CCTS</p>			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are there procedures and records that are maintained for communications and activities regarding the company's environmental aspects and its overall EMS?</p> <p>How are internal communications between different levels and different functions documented?</p> <p>How are they handling and documenting receipt and response to relevant questions from interested parties?</p> <p>What was their decision on externally communicating significant environmental aspects, and where it is documented?</p> <p>What method have they implemented to communicate externally on significant aspects?</p>			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.4	TITLE:	(EMS) Documentation
ISO 14001 STANDARD:		NO	PARTIAL
The EMS documentation shall include: a) the environmental policy, objectives and targets, b) description of the scope of the EMS, c) description of the main elements of the EMS and their interaction, and reference to related documents, d) documents, including records, required by this International Standard, and e) documents, including records, determined by the organization to be necessary to ensure the effective planning, operation and control of processes that relate to its significant environmental aspects.			X
FACILITY IMPLEMENTATION OF STANDARD:			
The C-AD/SMD Environmental Management Program Description describes how the EMS program is implemented through use of the BNL SBMS and the Operational Procedures Manual. The Contacts and Responsibilities attachment gives pertinent information regarding individuals responsible at the department as well as the laboratory level. In addition, the Document Flow-down matrix gives a detail of the various documents of the C-A/SMD EMS.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM 1.10.2 – C-AD/SMD Environmental Management Program Description OPM 1.10.2.b – C-A/SMD EMS Contacts and Responsibilities OPM 1.10.2.c – C-A/SMD EMS Flow-down Document Matrix OPM 1.10.2.d – C-A/SMD Environmental Management Matrix of Objective and Targets for Significant Aspects Form OPM 14.1 – Environmental Management Program for C-AD/SMD BNL ISO 14001 “Plus” EMS Manual SBMS Subject Area – Self Assessment C-A/SMD Organization Chart			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
How is the organization’s EMS documented and maintained? Does the EMS documentation address all required content? Does the system document how the related documentation [regulations, permits, forms, etc.] is to be used? Have they determined what documents and records are needed to ensure effective planning, operation and control of processes that relate to significant aspects?			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.5	TITLE:	Control of Documents
ISO 14001 STANDARD:		NO	PARTIAL
<p>Documents required by the EMS and by this International Standard shall be controlled. Records are a special type of document and shall be controlled in accordance with the requirements given in 4.5.4.</p> <p>The organization shall establish, implement and maintain a procedure(s) to</p> <ul style="list-style-type: none"> a) approve documents for adequacy prior to issue, b) review and update as necessary and re-approve documents, c) ensure that changes and the current revision status of documents are identified, d) ensure that relevant versions of applicable documents are available at points of use, e) ensure that documents remain legible and readily identifiable, f) ensure that documents of external origin determined by the organization to be necessary for the planning and operation of the EMS are identified and their distribution controlled, and g) prevent the unintended use of obsolete documents and apply suitable identification to them if they are retained for any purpose. 			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Documents required by the EMS and by this International Standard are controlled as required. Both organizations have established, implemented and maintain procedure(s) to address approve documents usage, current revision status of documents, ensure that documents remain legible and identifiable, ensure that documents necessary for the planning and operation of the EMS are identified and their distribution controlled, and have controls in place to prevent unintended use of obsolete documents. In addition, vendor manuals are identified and posted on the C-AD web page and DOE performed a Design Control Review of C-AD drawing controls. DOE identified (1) observation that OPM 13.6.1 should be linked to the SBMS Subject Area. This OPM is currently being revised to reflect this condition.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM 1.1, OPM 1.2, OPM 1.4, OPM 1.4.3, OPM 1.4.7, OPM 13.4, OPM 13.4, OPM 13.6.1			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Are there procedures for controlling and maintaining all documents required by ISO 14001? Are the documents accessible?</p> <p>Are EMS documents reviewed, updated and approved or re-approved ? Where does this requirement exist? (Note: periodic reviews are no longer required.)</p> <p>Do document control procedures cover all required elements?</p> <p>Are latest versions of documents available in all areas and by all personnel that perform tasks essential to the effective functioning of the EMS?</p> <p>Are documents of external origin needed for the EMS (e.g., maintenance manuals, CFRs, etc.) identified and controlled?</p> <p>Are obsolete documents removed from use and assured from unintended use? Are any historical copies maintained & labeled?</p>			

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Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.6	TITLE:	Operational Control
ISO 14001 STANDARD:		NO	PARTIAL
<p>The organization shall identify and plan those operations that are associated with the identified significant environmental aspects consistent with its policy, objectives and targets, in order to ensure that they are carried out under specified conditions, by:</p> <ul style="list-style-type: none"> a) establishing, implementing and maintaining a documented procedure(s) to control situations where their absence could lead to deviation from the environmental policy, objectives and targets; b) stipulating operating criteria in the procedure(s); c) establishing, implementing and maintaining procedures related to the identified significant environmental aspects of goods and services used by the organization and communicating applicable procedures and requirements to suppliers, including contractors. 		X	
<p>FACILITY IMPLEMENTATION OF STANDARD: Operational Control Forms are prepared in accordance with the SBMS Identification of Significant Aspects and Impacts SA, OPM 1.10.2, 8.20, 2.5, 2.5.1, 2.5.2, 6.1.10, 6.1.11, 9.1.15, 9.2.1, 9.3.1, 2.28 and 2.29. SMD – OPMs 8.1.1.22, 8.1.1.28, 8.1.1.29, 8.1.1.33 and 8.1.1.38. The OCF documents the operation, the activity/aspect(s) of the operation, the necessary maintenance plans, actions to take if a control fails, and responsible individuals and training required for the operation.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST): OPMs 1.10.2, OPM 8.20, SBMS Subject Area, Identification of Significant Aspects and Impacts, C-A Operational Control Forms, Cap Inspections, Experimental Safety Reviews, EMP Beamline Construction and Disassembly.</p>			
<p>COMMENTS: Reviewed C-AD Cryogenic Section satellite area and found waste controlled in accordance with OPM 1.10.2, 8.20 and SBMS Subject Area requirements.</p>			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Have the operations and activities been identified that are associated with the significant environmental aspects?</p> <p>Are the identified operations and activities consistent with the company's policy, objectives and targets?</p> <p>Is there a maintenance plan for the above identified operations and activities?</p> <p>Does work planning take significant aspects into account and ensure that adequate controls are established?</p> <p>Have procedures been established and maintained for the above operations that, if they are not followed for these situations, could lead to deviations from the environmental policy and the objectives and targets?</p> <p>Are operating criteria clearly established and documented in the procedures for the operations and activities identified above?</p> <p>Have the significant environmental aspects of raw materials, supplies and services used in the above operations and activities been identified?</p> <p>Are there procedures for handling raw materials, supplies and services used in the activities associated with significant impacts?</p> <p>Are relevant procedures and requirements communicated to the appropriate suppliers and contractors?</p> <p>Are operational controls in place and working?</p>			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.7	TITLE:	Emergency Preparedness and Response
ISO 14001 STANDARD:			
		NO	PARTIAL
<p>The organization shall establish, implement and maintain a procedure(s) to identify potential for and respond to accidents and emergency situations, and for preventing and mitigating the environmental impacts that may be associated with them.</p> <p>The organization shall review and revise, where necessary, its emergency preparedness and response procedures, in particular, after the occurrence of accidents or emergency situations.</p> <p>The organization shall also periodically test such procedures where practicable.</p>		<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	<div style="border: 1px solid black; height: 100px; width: 100%; text-align: center; vertical-align: middle;">X</div>
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The emergency preparedness and response procedures for C-A/SMD are documented in the respective Operations Procedure Manual. In addition, a drill to test emergency preparedness is performed on an annual basis. The results are documented, and applicable procedural changes and training recommendations resulted from the drill are implemented as required.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM Section 3.0, 10.1 and 10.2. SMD - OPM 3.0. Self Assessment Plans</p>			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are there maintained procedures to identify potential for accidents and emergency situations?</p> <p>Are there maintained procedures to respond to accidents and emergency situations?</p> <p>Are there maintained procedures to prevent and minimize the environmental impacts that may be associated with the identified accidents and emergency situations?</p> <p>Are there reviews and revisions of the emergency preparedness and response procedures, particularly after an incident?</p> <p>Are there periodic tests of the above procedures?</p>			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.1	TITLE:	Monitoring and Measurement
ISO 14001 STANDARD:		NO	PARTIAL
<p>The organization shall establish, implement and maintain a procedure(s) to monitor and measure, on a regular basis, the key characteristics of its operations that can have a significant environmental impact. The procedure(s) shall include the documenting of information to monitor performance, applicable operational controls and conformity with the organization's environmental objectives and targets.</p> <p>The organization shall ensure that calibrated or verified monitoring and measurement equipment is used and maintained and shall retain associated records.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The C-A/SMD Environmental Compliance Representative is required to specify areas where compliance monitoring is required. The C-A QA is required to audit to assure that the compliance monitoring is accomplished. Other monitoring and measurement is performed as specified in the Operational Control Forms and associated Operational Procedures. With the exception of confirmatory air sampling performed by the C-A Radiological Control Division, soil cap inspections, chipmunk measurements, ground water wells, laboratory analysis there is no other equipment in the C-A EMS requiring calibration.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPMs 1.14, 1.15, 2.19, 8.20, 8.20.1, 8.20.2, 1.8, 1.19, 2.5.2.1, 2.5.3.1, 6.1.10, 8.16 series, 8.18.1, 8.18.1.a, 8.18.4, 8.18.5, 8.22, 8.27, 8.31, 9.5.12, 9.5.15 and 2.30, SBMS Subject Area.			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are procedures documented and maintained to monitor and measure operations that can have a significant impact on the environment?</p> <p>Is there a calibration or verification system for monitoring equipment?</p> <p>Is calibration up to date? How do they know when calibration is due?</p> <p>If stickers are required by internal procedures, are they in place?</p> <p>How are they evaluating/determining EMS performance (vs. conformance)?</p>			

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ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.2	TITLE:	Evaluation of Compliance
ISO 14001 STANDARD:		NO	PARTIAL
<p>4.5.2.1 Consistent with its commitment to compliance, the organization shall establish, implement and maintain a procedure(s) for periodically evaluating compliance with relevant environmental legislation and regulations.</p> <p>The organization shall keep records of the results of the periodic evaluations.</p> <p>4.5.2.2 The organization shall evaluate compliance with other requirements to which it subscribes. The organization may wish to combine this evaluation with the evaluation of legal compliance referred to in 4.5.2.1 or establish a separate procedure(s).</p> <p>The organization shall keep records of the results of the periodic evaluations.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
C-AD ESHQ tickler card 304 was developed and issued in December 2005 to evaluate compliance corrective action issues. This tickler card was reviewed and found completed on schedule.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPMs 1.10.2 and 13.10.1 OPM 10.0 series SBMS Critiques SA SBMS Occurrence Reporting and Processing System SA SBMS Nonconformance & Corrective and Preventive Action SA C-A/SMD ATS C-A ESHQ TC 304			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Does the company have a documented procedure for periodically evaluating compliance with environmental legislation and regulations? Do compliance assessments include "other requirements"? Who is responsible for ensuring that all environmental media are covered over some time period? Are results of evaluations documented and records retained?			

Brookhaven National Laboratory
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Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.3	TITLE:	Nonconformity, Corrective Action and Preventive Action
ISO 14001 STANDARD:		NO	PARTIAL
<p>The organization shall establish, implement and maintain a procedure(s) for dealing with actual or potential nonconformities and for taking corrective and preventive action. The procedure shall define requirements for</p> <ul style="list-style-type: none"> a) identifying and correcting nonconformities and taking actions to mitigate their environmental impacts b) investigating nonconformities, determining their causes and taking actions in order to avoid their recurrence c) evaluating the needs for actions to prevent nonconformities and implementing appropriate actions designed to avoid their occurrence. d) Recording the results of corrective actions and preventive actions taken e) Reviewing the effectiveness of corrective actions and preventive actions taken. <p>Actions taken shall be appropriate to the magnitude of problems and the environmental impact encountered.</p> <p>The organization shall ensure that any necessary changes are made to EMS documentation.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>EMS nonconformances are documented by three mechanisms: Occurrence Reporting and Processing System (ORPS), Critiques, and through the SBMS Nonconformance & Corrective and Preventive Action subject area. Critiques and NCR's are tracked for closure and corrective action through the family ATS. ORPS reportable incidents are tracked to closure through a higher level Laboratory & DOE tracking system. Copies of Critiques and NCR's with supporting documentation are on the C-AD web page and are available for review. ORPS can be found through the C-A web site. Critiques and NCR's were noted as in the C-A ATS family system. External audit/assessment findings are tracked on the BNL Institutional Tracking System. A review of all tracking systems identified that all findings associated with C-AD have been closed.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM 1.10.2, OPM 10.0 series, OPM 13.3.2, SMD-ACATS, C-AD FATS and BNL ATS SBMS Critiques SA, SBMS Occurrence Reporting and Processing System SA SBMS Nonconformance & Corrective and Preventive Action SA, C-A ATS, BNL Institutional Tracking System</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Are procedures documented and maintained for defining responsibility and authority for handling, investigating and taking action to minimize impacts of nonconformities?</p> <p>Does the corrective action program address both actual and potential (e.g., near miss) nonconformities?</p> <p>Is evaluation of the need to prevent nonconformities included in procedures?</p> <p>Are procedures documented and maintained for initiating and completing corrective and preventive action?</p> <p>Are appropriate corrective and preventive actions taken?</p> <p>Are the results of the corrective and preventive actions implemented and recorded?</p> <p>Is the effectiveness of corrective and preventive actions reviewed?</p>			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.4	TITLE:	Control of Records
ISO 14001 STANDARD:			
The organizational shall establish and maintain records as necessary to demonstrate conformity to the requirements of its EMS and of this International Standard, and the results achieved.		NO	PARTIAL
The organization shall establish, implement and maintain a procedure(s) for the identification, storage, retrieval, retention and disposal of environmental records.			
Environmental records shall be and remain legible, identifiable, and traceable.			YES
FACILITY IMPLEMENTATION OF STANDARD:			
Records are maintained in accordance with the SBMS Records Management subject area. Departmental level procedures that supplement the SBMS are C-A-OPM 13.4.1 – Records Management, and C-A-OPM 13.4.2 – Records Index. The Records Index has a specific attachment detailing the EMS Records within C-AD/SMD. This index lists the name of the record, the record custodian, the record schedule and the retention.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
SBMS Records Management SA C-A-OPM 13.4.1 C-A-OPM 13.4.2 SMD – OPM 2.1			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT		MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Are procedures documented and maintained for the identification, maintenance and disposition of environmental records?			
Are the records legible, identifiable and traceable to the activity, product or service involved?			
Where are EMS records kept?			
Are the records stored and maintained such that they are readily retrievable and protected against damage, deterioration or loss?			
Are there documented specified retention times for all of the records identified?			
Are records demonstrating the results of the EMS maintained?			
Are records managed and retained per plans/procedures?			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		MANAGEMENT REVIEW	
ELEMENT:	4.5.5	TITLE:	Internal (EMS) Audit
ISO 14001 STANDARD:			
		NO	PARTIAL
		YES	
<p>The organization shall ensure that internal audits of the EMS are conducted at planned intervals to</p> <p>a) determine whether the EMS</p> <p style="padding-left: 20px;">1) conforms to planned arrangements for environmental management including the requirements of this International Standard, and</p> <p style="padding-left: 20px;">2) has been properly implemented and is maintained; and</p> <p>b) provide information on the results of audits to management.</p> <p>Audit programme(s) shall be planned, established, implemented and maintained by the organization, taking into consideration the environmental importance of the operation(s) concerned and the results of previous audits.</p> <p>Audit procedure(s) shall be established, implemented and maintained that address</p> <ul style="list-style-type: none"> - responsibilities and requirements for planning and conducting audits, reporting results, and retaining associated records, - the determination of audit criteria, scope, frequency and methods. <p>Selection of auditors and conduct of audits shall ensure objectivity and the impartiality of the audit process.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The EMS audit is scheduled and performed in accordance with the C-A Department Self-Assessment Program. The C-A QA group maintains a database of audit schedules as well as audits and audit reports. Audits are conducted in accordance with the SBMS Environmental Assessments subject area and OPM 1.10.2. In addition, an external audit/assessment by NSF is performed on an annual basis as well as an BNL internal assessment. Findings and/or observations are tracked until properly closed.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPMs 1.10.2 and 13.10.1</p> <p>SBMS Environmental Assessments SA</p> <p>SMD Self Assessment Program</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Are procedures documented and maintained for periodic EMS audits?</p> <p>Has the environmental importance of operations and results of previous audits been incorporated into the audit program?</p> <p>Does the EMS audit determine whether their EMS has been implemented and maintained and conforms to this standard?</p> <p>Does the procedure for EMS audits include the scope of the audit, frequency, methodologies used, responsibilities, responsibilities, requirements, and method of reporting results?</p> <p>Does the EMS audit provide results of the audits to management?</p> <p>Are EMS audit records maintained?</p> <p>Can the independence of the auditor be demonstrated (e.g., freedom from responsibility for the activity being audited.)?</p>			

Brookhaven National Laboratory
ISO 14001 EMS Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07 Lead Auditors: R.Savage/M.VanEssendelft

Environmental Management System Model		MANAGEMENT REVIEW	
ELEMENT:	4.6	TITLE:	Management Review
ISO 14001 STANDARD:		NO	PARTIAL
<p>Top management, shall review the organization's EMS, at planned intervals, to ensure its continuing suitability, adequacy, and effectiveness.</p> <p>Reviews shall include assessing opportunities for improvement and the need for changes to the EMS, including the environmental policy, objectives and targets.</p> <p>Records of the management reviews shall be retained.</p> <p>Inputs to management reviews shall include</p> <ul style="list-style-type: none"> a) results of internal audits and evaluations of compliance with legal requirements and with other requirements to which the organization subscribes, b) communication(s) from external interested parties, including complaints, c) the environmental performance of the organization, d) the extent to which objectives and targets have been met, e) status of corrective and preventive actions, f) follow-up actions from previous management reviews, g) changing circumstances, including developments in legal and other requirements related to its environmental aspects, and h) recommendations for improvement. <p>The outputs from management reviews shall include any decisions and actions related to possible changes to the environmental policy, objectives, targets and other elements of the EMS, consistent with the commitment to continual improvement.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The Management Review for C-AD/SMD was completed as scheduled. Objectives and Targets addressed in OPM 14.1, Environmental Management Program for C-AD/SMD.</p> <p>C-AD/SMD Self Assessment Program</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM 1.10.2, OPM 14.1</p> <p>SBMS Environmental Assessments SA, C-A Management Review Agenda (2006), C-A Management Review (2006)</p> <p>C-A Management Review Minutes (2006), C-A Record of Decision (2006)</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Has the top management performed a documented review of the EMS on a periodic basis?</p> <p>Does the review address the system's continued suitability, the system's adequacy, the system's effectiveness, the system's possible need to change its policy, the system's possible need to change its objectives and other elements of the EMS in light of the audit results, continual improvement, etc., the system audit as required in 4.5.4, and the Nonconformances and Corrective and Preventive Action?</p> <p>Is there a record of decision which outlines actions for the coming year?</p>			

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OHS Management System Model		GENERAL REQUIREMENTS	
ELEMENT:	4.1	TITLE:	General Requirements
OHSAS 18001 STANDARD:		NO	PARTIAL
The organization shall establish and maintain an OH&S management system, the requirements of which are set out in Clause 4 of OHSAS 18001-1999.			X
FACILITY IMPLEMENTATION OF STANDARD: C-AD OHSAS 18001 program has been fully implemented for four years. Based on past audit observations the programs general requirements are well documented in OPM 1.10.4 OH&S Management System Program Description. This OPM describes how C-AD/SMD complies with OHSAS 18001, Occupational, Health and Safety Management System requirements.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST): OPM 1.10.4			
COMMENTS: See above.			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS: Has a program been established? Is the scope of the program clearly defined? How long has the program been established? Is it being maintained the requirements of OHSAS 18001-1999?			

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OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		OS&H POLICY	
ELEMENT:	4.2	TITLE:	OH&S Policy
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>There shall be an occupational health and safety policy authorized by the organization's top management that clearly states overall health and safety objectives and a commitment to improving health and safety performance. The policy shall :</p> <ul style="list-style-type: none"> a) be appropriate to the nature and scale of the organization's OH&S risks; b) include a commitment to continual improvement; c) include a commitment to at least comply with current applicable OH&S legislation and with other requirements to which the organization subscribes; d) be documented, implemented and maintained; e) be communicated to all employees with the intent that employees are made aware of their individual OH&S obligations; f) be available to interested parties; and g) be reviewed periodically to ensure that it remains relevant and appropriate to the organization. 			X
<p>FACILITY IMPLEMENTATION OF STANDARD:</p> <p>OPM 1.10.4 OH&S Management System Program Description describes how C-AD/SMD supports the BNL Mission by formalizing its processes to comply with OHSAS 18001, Occupational, Health and Safety Management System requirements. Employee awareness of this policy was not reviewed due to upcoming scheduled forums and awareness initiatives. However, based on past audit reviews of this element employees were found knowledgeable of requirements.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST):</p> <p>OPMs 1.10, 1.10.4 and OPM 2.12</p>			
<p>COMMENTS: See above.</p>			
<p>EVALUATION:</p>			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
<p>OPTIONAL AUDITOR QUESTIONS:</p> <p>What is the organization's policy?</p> <p>Is the policy defined and is it appropriate to the type, size, and OH&S impacts of the organization's activities?</p> <p>Does the policy include a commitment to continual improvement in the organization's operations?</p> <p>Does the policy reflect the organizations hazard identification, risk assessment and risk control in the organization's activities and facilities?</p> <p>Does the policy include a commitment to compliance to legal requirements?</p> <p>Is the policy documented, implemented, maintained (periodically reviewed) and communicated to all employees and are they aware of their responsibilities to the OH&S?</p>			

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		PLANNING	
ELEMENT:	4.3.1	TITLE:	Planning for hazard identification, risk assessment and risk control
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain procedures for the ongoing identification of hazards, the assessment of risks, and the implementation of necessary control measures. These shall include:</p> <ul style="list-style-type: none"> <input type="checkbox"/> routine and non-routine activities; <input type="checkbox"/> activities of all personnel having access to the workplace (including subcontractors and visitors); <input type="checkbox"/> facilities at the workplace, whether provided by the organization or others. <p>The organization shall ensure that the results of these assessments and the effects of these controls are considered when setting its OH&S objectives. The organization shall document and keep this information up to date.</p> <p>The organization's methodology for hazard identification and risk assessment shall:</p> <ul style="list-style-type: none"> <input type="checkbox"/> be defined with respect to its scope, nature and timing to ensure it is proactive rather than reactive; <input type="checkbox"/> provide for the classification of risks and identification of those that are to be eliminated or controlled by measures as defined in 4.3.3 and 4.3.4; <input type="checkbox"/> be consistent with operating experience and the capabilities of risk control measures employed; <input type="checkbox"/> provide input into the determination of facility requirements, identification of training needs and/or development of operational controls; <input type="checkbox"/> provide for the monitoring of required actions to ensure both the effectiveness and timeliness of their implementation. <p>NOTE For further guidance on hazard identification, risk assessment and risk control, see OHSAS 18002.</p>			X
<p>FACILITY IMPLEMENTATION OF STANDARD:</p> <p>OH&S procedures are in place and reflect the processes for identifying hazards and associated risks for routine and non-routine activities. Thirty (30) FRA and (31) JRA activities for 2007 were reviewed and found to be on schedule with the assigned C-AD/SMD task schedule. In addition, FRA/JRA procedure controls identified have been updated during 2006 to reflect current conditions and to prevent or reduce injuries such as arc blast conditions, NRTL requirements per 29CFR1910 Subpart S and NFPA 70E PPE requirements.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST):</p> <p>OPMs 1.10, 1.10.4, 2.28 and 2.29, Hazard Analysis and Risk Assessments.</p> <p>SMD Accelerator Safety Envelopes</p>			

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

COMMENTS: None		
EVALUATION:		
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS: Are there documented and maintained procedures to establish and update hazards, risks and implementation of controls? Does the procedure cover routine and non routine activities? Does the procedure cover all personnel and facilities? What mechanism is used to initiate hazard review/revision when operations change? Do the criteria for the assessment of risk address both likely hood and consequence? Are there records to provide evidence of analysis of hazards, risks and controls? Are there any obvious hazards that should have been considered and were not? If not, why not? Are results of assessments and effects of controls considered when setting OH&S objectives and are they documented and up to date? Does the methodology: <ul style="list-style-type: none"> • define scope, nature and timing? • ensure proactive rather than reactive assessments? • provide for classification of risk tolerability? • identify those to be eliminated or controlled? • assure consistency with operating experience? (Ref. 4.3.1C of OHSAS 18002-2000) • assure consistency with effectiveness of risk control measures? Does the methodology provide input into determination of facility requirements, training needs and operational controls? Does the methodology provide for monitoring of required actions to ensure timeliness and effectiveness of implementation?		

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		PLANNING	
ELEMENT:	4.3.2	TITLE:	Legal and Other Requirements
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain a procedure for identifying and accessing the legal and other OH&S requirements that are applicable to it.</p> <p>The organization shall keep this information up-to-date. It shall communicate relevant information on legal and other requirements to its employees and other relevant interested parties.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Verified that C-AD has incorporated new or revised legal requirements (e.g. 10CFR851 (pressure requirements), 29CFR1910 (NRTL requirements), NFPA 70E PPE requirements) into their OPM procedures to reflect current conditions.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OHSAS 18001 Interim Procedure SBMS Subject Area C-A OPMs 1.10.4, 1.5, 1.5.a, 1.5.b, 1.5.c, 1.5.d, 1.5.1, 1.5.3, 1.5.4, 1.12.c, 2.28, 8.17.2, 13.6.1, 13.6.1.a, 13.7.1, 14.30 OSHA Publications web site (www.osha.gov) SBMS subscription service</p>			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Is there a documented procedure for the organization to identify and have access to all applicable legal requirements?</p> <p>Is someone (or more than one) designated to keep current on requirements?</p> <p>What are the resources, references and methods to keep current?</p> <p>How is applicability of new requirements determined?</p> <p>How are requirements communicated to all interested party?</p>			

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		PLANNING	
ELEMENT:	4.3.3	TITLE:	Objectives
OHSAS 18001 STANDARD:		NO	PARTIAL
YES			
<p>The organization shall establish and maintain documented occupational health and safety objectives, at each relevant function and level within the organization.</p> <p>NOTE Objectives should be quantified wherever practicable.</p> <p>When establishing and reviewing its objectives, an organization shall consider its legal and other requirements, its OH&S hazards and risks, its technological options, its financial, operational and business requirements, and the views of interested parties. The objectives shall be consistent with the OH&S policy, including the commitment to continual improvement.</p>		X	
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Observation: Objectives and Targets states that the organization shall establish and maintain documented environmental/occupational health and safety objectives, at each relevant function and level within the organization. On March 12, 2007 OPM 14.30, C-AD/SMD OSH Management Plan for Accelerators, Experimental Areas, Shop and/or Offices was issued which identified C-AD/SMD OSH Objectives and Targets for 2007. However, due to the date of issuance of this OPM, the C-AD FY 2007 Self-Assessment Report which identifies an evaluation of the objectives and measures has not been issued as required. Based on discussion with the author of the 2007 Self-Assessment Report it is scheduled for issuance during the first week of May 2007.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPMs 1.10.4, 14.30, 1.10, 13.10.1 and Self Assessment Plans			
COMMENTS: See above comment.			
EVALUATION:			
MEETS REQUIREMENT (See Observation Above)	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
OPTIONAL AUDITOR QUESTIONS:			
<p>Has the organization established and maintained OSH objectives?</p> <p>Have the documented objectives considered legal and other requirements?</p> <p>Are objectives reasonable and measurable?</p> <p>Is there a documented and maintained procedure for periodically reviewing objectives?</p> <p>Are objectives communicated to the employees that are supposed to achieve them?</p> <p>Are organizational objectives consistent with Lab/higher level objectives?</p>			

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OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		PLANNING	
ELEMENT:	4.3.4	TITLE:	OH&S Management Program(s)
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain (an) OH&S management program(s) for achieving its objectives. This shall include documentation of :</p> <p style="margin-left: 40px;">a) the designated responsibility and authority for achievement of the objectives at relevant functions and levels of the organization; and</p> <p style="margin-left: 40px;">b) the means and time-scale by which objectives are to be achieved.</p> <p>The OH&S management program(s) shall be reviewed at regular and planned intervals. Where necessary the OH&S management program(s) shall be amended to address changes to the activities, products, services, or operating conditions of the organization.</p>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
<p>FACILITY IMPLEMENTATION OF STANDARD:</p> <p>The OH&S Management System including responsibilities for implementing the OH&S system are addressed in OPMs 14.30, SMD OH&S Management Plan and 1.10.4, OH&S Management System Program Description.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST):</p> <p>R2A2's (Top Management, SMD OHSAS representative and OHSAS team)</p> <p>OPMs 1.10.4, 1.10 and 14.30</p>			
<p>COMMENTS: None</p>			
<p>EVALUATION:</p>			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
<p>OPTIONAL AUDITOR QUESTIONS:</p> <p>Are there programs to achieve all the identified objectives?</p> <p>Do the programs include schedules for completion and resources necessary to achieve the objectives?</p> <p>Do the programs assign responsibilities for completion of tasks in achieving objectives?</p> <p>Are all procedures that supplement the OHS management program available to the appropriate personnel and current?</p> <p>Are the management programs reviewed at planned intervals and amended as required?</p>			

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Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.1	TITLE:	Structure and Responsibility
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The roles, responsibilities and authorities of personnel who manage, perform and verify activities having an effect on the OH&S risks of the organization's activities, facilities and processes, shall be defined, documented and communicated in order to facilitate OH&S management.</p> <p>Ultimate responsibility for occupational health and safety rests with top management. The organization shall appoint a member of top management (e.g. in a large organization, a Board or executive committee member) with particular responsibility for ensuring that the OH&S management system is properly implemented and performing to requirements in all locations and spheres of operation within the organization.</p> <p>Management shall provide resources essential to the implementation, control and improvement of the OH&S management system.</p> <p>NOTE Resources include human resources and specialized skills, technology and financial resources.</p> <p>The organization's management appointee shall have a defined role, responsibility and authority for:</p> <ul style="list-style-type: none"> a) ensuring that OH&S management system requirements are established, implemented and maintained in accordance with this OHSAS specification; b) ensuring that reports on the performance of the OH&S management system are presented to top management for review and as a basis for improvement of the OH&S management system. <p>All those with management responsibility shall demonstrate their commitment to the continual improvement of OH&S performance.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
OH&S structure and responsibility is properly addressed in C-A OPM 1.10.4, sections 3.2 and 3.3. General responsibilities are addressed and documented further in C-A OPMs 1.10, Environment Safety and Health Policy and OPM 13.1.1, Quality, OH&S and Environmental Policy.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
C-A OPM 1.10, OPM 1.10.4, OPM 1.10.4.a , 13.1.1, R2A2s, C-AD/SMD Organization Charts			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Are roles and responsibility, and authorities defined, documented and communicated?			
Has management provided the necessary resources (people, technology, money) to implement this OH&S program?			
Has the organization appointed an OH&S management appointee from top management?			
Does the R2A2 of the OH&S management appointee document sufficient authority to accomplish a & b above?			
How does management demonstrate their commitment for continual improvement of OH&S performance?			

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Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.2	TITLE:	Training, Awareness and Competence
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>Personnel shall be competent to perform tasks that may impact on OH&S in the workplace. Competence shall be defined in terms of appropriate education, training and/or experience. The organization shall establish and maintain procedures to ensure that its employees working at each relevant function and level are aware of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> the importance of conformance to the OH&S policy and procedures, and to the requirements of the OH&S management system; <input type="checkbox"/> the OH&S consequences, actual or potential, of their work activities and the OH&S benefits of improved personal performance; <input type="checkbox"/> their roles and responsibilities in achieving conformance to the OH&S policy and procedures and to the requirements of the OH&S management system, including emergency preparedness and response requirements (see 4.4.7); <input type="checkbox"/> the potential consequences of departure from specified operating procedures. <p>Training procedures shall take into account differing levels of:</p> <ul style="list-style-type: none"> <input type="checkbox"/> responsibility, ability and literacy; and <input type="checkbox"/> risk. 			X
FACILITY IMPLEMENTATION OF STANDARD:			
Training within the C-AD and SMD facilities is presently at 98%. C-AD/SMD personnel awareness of OH&S policy requirements appear on target due to the recent OHSAS/EMS training provided.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPMs 1.10.4 , 1.12, 1.12.b, 1.12.c, 9.8.1, 9.4.2, 2.28, 2.29, 2.1, 2.12, SBMS Subject Area, C-AD/SMD JTAs, Training Records			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Are procedures established and maintained to make employees aware of a – d above?			
How do you ensure personnel are competent to perform tasks that impact OHS?			
Has the appropriate training been done and, where required, by qualified trainers?			
Do the training procedures take into account the differing levels of responsibility, ability, literacy and risk?			
Are there specific, documented minimum requirements for each person performing a task that can cause significant OHS impact?			

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Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.3	TITLE:	Consultation and Communication
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall have procedures for ensuring that pertinent OH&S information is communicated to and from employees and other interested parties.</p> <p>Employee involvement and consultation arrangements shall be documented and interested parties informed. Employees shall be:</p> <ul style="list-style-type: none"> <input type="checkbox"/> involved in the development and review of policies and procedures to manage risks; <input type="checkbox"/> consulted where there are any changes that affect workplace health and safety; <input type="checkbox"/> represented on health and safety matters; and <input type="checkbox"/> informed as to who is their employee OH&S representative(s) and specified management appointee (see 4.4.1). 		<div style="border: 1px solid black; height: 150px; width: 100%;"></div>	<div style="border: 1px solid black; height: 150px; width: 100%;"></div>
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Since last year communication and consultation between WOSH committee members, C-AD employees and DOE external communication has elevated. There has been greater employee involvement in the JRA process. WOSH committee consultation concerning 2007 OSH objectives and targets focused on complying with the 10CFR851 requirement for worker participation in establishing health and safety goals that represent meaningful improvement goals. C-AD external communication with DOE concerning Arc Flash corrective and preventive actions taken to prevent injuries in the work place are a few examples of these enhancements.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPMs 1.10.3, 1.10.4, 2.12, 9.8.1, 9.4.2, 2.28, 2.29, 10.1, SBMS Subject Area, SMD – OPM 2.12, SMD procedures			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are there procedures that are maintained for communications to and from interested parties regarding the organization's pertinent OH&S information?</p> <p>How are communications to and from interested parties documented?</p> <p>How are internal communications between different levels and different functions documented? How do you have feedback to management?</p> <p>How are employees involved in the development of policies and procedures to manage risks?</p> <p>How are employees consulted for changes that affect workplace health and safety?</p> <p>How employees are represented on OHS matters?</p> <p>Do people know who their employee OHS representative and/or management appointees are?</p> <p>How are OHS representatives involved in communication mechanisms with management/</p> <p>What initiatives do you have to encourage OHS consultations and improvement activities?</p> <p>What mechanisms are used to communicate OHS concerns or information to all interested parties and employees? e.g. inspections, briefings, notice boards, OHS newsletter, OHS poster programs.</p>			

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Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.4	TITLE:	Documentation
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain information, in a suitable medium such as paper or electronic form, that :</p> <ul style="list-style-type: none"> a) describes the core elements of the management system and their interaction; and b) provide direction to related documentation. <p>NOTE It is important that documentation is kept to the minimum required for effectiveness and efficiency.</p>			
FACILITY IMPLEMENTATION OF STANDARD:			
<p>C-A and SMD document control is developed and implemented in accordance BNL Internal Controlled Documents, SBMS Subject Area. The OH&S core elements are addressed in C-A OPM 1.10.4 and 1.10.4.a. C-A procedures that identify generation, review, approval and maintenance processes are identified as required.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPM 1.1 OPM 1.10.4 OPM 13.4.2</p> <p>OPM 1.2 OPM 1.10.4.a SBMS Subject Area</p> <p>OPM 1.4 (series) OPM 13.4.1 R2A2s</p> <p>SMD Assessment Documents and SMD JRAs/FRA's</p>			
COMMENTS: None			
EVALUATION:			
X MEETS REQUIREMENT		MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>How has the organization documented the core elements of its OHSAS 18001 system?</p> <p>How does the organization show linkage between all upper and lower level documentation?</p> <p>Does the system document how the related documentation, both internal and external, [regulations, permits, forms, etc.] are to be used?</p>			

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Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.5	TITLE:	Document and Data Control
OHSAS 18001 STANDARD:		NO	PARTIAL
The organization shall establish and maintain procedures for controlling all documents and data required by this OHSAS specification to ensure that: a) they can be located; b) they are periodically reviewed, revised as necessary and approved for adequacy by authorized personnel; c) current versions of relevant documents and data are available at all locations where operations essential to the effective functioning of the OH&S system are performed; d) obsolete documents and data are promptly removed from all points of issue and points of use or otherwise assured against unintended use; and e) archival documents and data retained for legal or knowledge preservation purposes or both, are suitably identified.			X
FACILITY IMPLEMENTATION OF STANDARD:			
The OH&S document/data controls are addressed in OPM 13.4.2.c and the SBMS Subject Area. All applicable OHSAS documents reflect current conditions and have been reviewed as scheduled. In addition, C-AD is assisting the Laboratory by converting the BNL OSH Interim Procedures into SBMS Subject Area documents. Presently, all but (4) of the (16) OSH interim sections (OSH Objectives, Communication, Audit and Management Review) have not been converted.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
BNL OHSAS Program Description, SBMS Subject Area – Self Assessment, C-AD/SMD Organization Chart OPMs 13.4.2.c, 1.2, 1.1, 1.4 series, 10.1, 2.2, 13.4.1, 13.4.2 SMD FRAs/JRAs			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Are there procedures for controlling and maintaining all documents (e.g., procedures and instructions) and/or data (e.g., engineering drawings and MSDS) required by this standard? Are the documents/data accessible (e.g., can the employee access the documents/data they need), including during an emergency? Are the documents/data periodically reviewed, revised and approved for adequacy by authorized personnel? Are latest versions of documents/data available in all areas and by all personnel that perform tasks essential to the effective functioning of the OH&S? Are obsolete documents/data removed from use and assured from unintended use? Are historical copies maintained & labeled? Are those obsolete documents/data that are retained for legal or knowledge reasons clearly identified? Are documents/data dated with the latest revision, orderly, legible and retained for a specified period?			

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Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OHS Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.6	TITLE:	Operational Control
OHSAS 18001 STANDARD:		NO	PARTIAL
YES			
<p>The organization shall identify those operations and activities that are associated with identified risks where control measures need to be applied. The organization shall plan these activities, including maintenance, in order to ensure that they are carried out under specified conditions by:</p> <ul style="list-style-type: none"> a) establishing and maintaining documented procedures to cover situations where their absence could lead to deviations from the OH&S policy and the objectives; b) stipulating operating criteria in the procedures; c) establishing and maintaining procedures related to the identified OH&S risks of goods, equipment and services purchased and/or used by the organization and communicating relevant procedures and requirements to suppliers and contractors; d) establishing and maintaining procedures for the design of workplace, process, installations, machinery, operating procedures and work organization, including their adaptation to human capabilities, in order to eliminate or reduce OH&S risks at source. 			X
<p>FACILITY IMPLEMENTATION OF STANDARD: Work planning controls are in-place (e.g. work permit reviews and approval process, work packages define associated work hazards and control measures, work control logging activities) within C-AD groups are implemented by C-AD personnel in accordance with C-AD Section 2 OPMs and SBMS Subject Area requirements.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST): SBMS Work Controls Subject Area, C-AD OPM Section 1, 2, 8 and 13 series, 9.2.1, 9.3.1. Risk Analysis records</p>			
<p>COMMENTS: Reviewed C-AD Cryogenic Section work controls system (e.g. work permits, logging activities and computer controls) for compliance with OPM Section 2 compliance. Work control system now is computerized and each work task is provided a unique work control number. Records are in-place and maintained as required.</p>			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
<p>OPTIONAL AUDITOR QUESTIONS: Have the operations and activities, including maintenance, been identified that are associated with the identified OH&S risks where control measures need to be applied? Have procedures been established and maintained for the above operations that, if they are not followed for these situations, could lead to deviations from the OH&S policy and the objectives? Are operating criteria clearly established and document/data in the procedures for the operations and activities identified above? Have the identified OH&S risks of goods, materials, equipment and services used in the above operations and activities been identified? Are there procedures for handling goods, materials, equipment and services used in the activities associated with identified risks where controls need to be applied?</p>			

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OH&S Management System Model		IMPLEMENTATION AND OPERATION	
ELEMENT:	4.4.7	TITLE:	Emergency Preparedness and Response
OHSAS 18001 STANDARD:			
		NO	PARTIAL
			YES
<p>The organization shall establish and maintain plans and procedures to identify the potential for, and responses to, incidents and emergency situations, and for preventing and mitigating the likely illness and injury that may be associated with them.</p> <p>The organization shall review its emergency preparedness and response plans and procedures, in particular after the occurrence of incidents or emergency situations.</p> <p>The organization shall also periodically test such procedures where practicable.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>The emergency preparedness and response procedures for SMD are documented in the respective Operations Procedure Manual. OPM 3.0. SMD participates in the BNL site emergency preparedness drills on an annual basis in lieu of preparing their own drill like C-AD. The results are documented, and applicable procedural changes and training recommendations resulted from the drill are implemented as required.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM Chapter 3.0, 10.1, Self Assessment Plan, SBMS Subject Area and SMD – OPM 3.0.			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are there maintained procedures to identify potential for accidents and emergency situations?</p> <p>Are there maintained procedures to respond to accidents and emergency situations?</p> <p>Are there maintained procedures to prevent and minimize the OH&S risks that may be associated with the identified accidents and emergency situations?</p> <p>Are there reviews and revisions of the emergency preparedness and response procedures, particularly after an incident?</p> <p>Are there periodical tests of the above procedures?</p>			

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OH&S Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.1	TITLE:	Performance Measurement and Monitoring
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain procedures to monitor and measure OH&S performance on a regular basis. These procedures shall provide for:</p> <ul style="list-style-type: none"> a) both qualitative and quantitative measures, appropriate to the needs of the organization; b) monitoring of the extent to which the organization's OH&S objectives are met; c) proactive measures of performance that monitor compliance with the OH&S management program, operational criteria and applicable legislation and regulatory requirements; e) reactive measures of performance to monitor accidents, ill health, incidents (including near-misses) and other historical evidence of deficient OH&S performance; f) recording of data and results of monitoring and measurement sufficient to facilitate subsequent corrective and preventive action analysis. <p>If monitoring equipment is required for performance measurement and monitoring, the organization shall establish and maintain procedures for the calibration and maintenance of such equipment. Records of calibration and maintenance activities and results shall be retained.</p>		X	
<p>FACILITY IMPLEMENTATION OF STANDARD: C-AD/SMD procedures provide instruction for monitoring, measurement and record of OH&S performance are developed, implemented and are reviewed on a 3-year cycle. Specific monitoring of OH&S hazards are performed using the facility specific OH&S operational control forms using their respective OPM instructions. These documents are identified in OPM 1.10.4.a, OH&S Document Flow Down Matrix. Active monitoring is addressed via. Tier I Safety Inspections, OPM 9.8.1 Worker Occupational Safety and Health Committee (OH&S) Policy and Requirements and Hearing Conservation Program. Reactive monitoring processes which address work related injuries are found in SBMS Subject Area and the Occurrence Reporting and Processing Program. The laboratory procedure for calibrating OH&S instruments is addressed in the Instrument Calibration and Maintenance Program which is performed by the Safety and Health Division, Industrial Hygiene Group. The C-AD/SMD ODH monitoring instruments are calibrated by C-AD in accordance with OPM 13.8.2, Calibration procedure and SBMS Subject Area requirements. Instruments such as RF, Gas, and Noise monitoring devices are calibrated by the Safety and Health Division, Industrial Hygiene Group.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST): OPMs 1.10.4, 1.10.4.a, 13.8.2, OPM Chapters 1, 8, 9, 10 and 13, SBMS Subject Area and SMD Assessments.</p>			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Do the procedures address qualitative and quantitative measures?			
Are procedures document/data and maintained to monitor and measure OH&S performance on a regular basis?			
Are monitoring of OH&S objectives performed?			
Does the OH&S management program include proactive measures to address operational criteria, legal requirements and regulatory standards?			

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OH&S Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.2	TITLE:	Accidents, incidents, nonconformances and corrective and preventive action
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain procedures for defining responsibility and authority for:</p> <ul style="list-style-type: none"> a) the handling and investigation of: <ul style="list-style-type: none"> — accidents; — incidents; — non-conformances; b) taking action to mitigate any consequences arising from accidents, incidents or nonconformances; c) the initiation and completion of corrective and preventive actions; d) confirmation of the effectiveness of corrective and preventive actions taken. <p>These procedures shall require that all proposed corrective and preventive actions shall be reviewed through the risk assessment process prior to implementation.</p> <p>Any corrective or preventive action taken to eliminate the causes of actual and potential nonconformances shall be appropriate to the magnitude of problems and commensurate with the OH&S risk encountered.</p> <p>The organization shall implement and record any changes in the documented procedures resulting from corrective and preventive action.</p>			X
<p>FACILITY IMPLEMENTATION OF STANDARD: Accidents, Incidents, Non-Conformances, and Corrective and Preventive Actions are identified in C-AD OPM 9.4.5 which addresses accidents as an unexpected event that produces personal injury, illness or death; damage to, or loss of property or vehicles; or environmental occurrences involving reportable quantities of specific substances and C-AD OPM 10.1 which addresses additional information on Occurrence Reporting and Critique requirements in accordance with SBMS Subject Area. In addition, C-AD posts all associated Occurrence Reports and Critiques on their web page so that employees are made aware of these conditions.</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST): OPMs 9.4.1, 9.4.5 and 10.1, SBMS Subject Area, SMD – OPM 2.2</p>			
<p>COMMENTS: None</p>			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
<p>OPTIONAL AUDITOR QUESTIONS:</p> <p>Are procedures documented and maintained for defining responsibility and authority for handling and investigating of accidents, incidents and nonconformances?</p> <p>Are procedures documented and maintained for initiating and completing corrective and preventive action? Is a risk assessment conducted for these actions?</p>			

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Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.3	TITLE:	Records and records management
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization shall establish and maintain procedures for the identification, maintenance and disposition of OH&S records, as well as the results of audits and reviews.</p> <p>OH&S records shall be legible, identifiable and traceable to the activities involved. OH&S records shall be stored and maintained in such a way that they are readily retrievable and protected against damage, deterioration or loss. Their retention times shall be established and recorded.</p> <p>Records shall be maintained, as appropriate to the system and to the organization, to demonstrate conformance to this OHSAS specification.</p>			X
FACILITY IMPLEMENTATION OF STANDARD:			
<p>Record systems in-place and in accordance with OPM 13.4.2 and SBMS Subject Area requirements. In addition, OPM 13.4.2.c was recently revised in October 2006 to be consistent with BNL format for identifying OHSAS Line Organization Files and BNL Site Level Files.</p>			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
<p>OPMs 1.1, 1.2, 1.4 series, 10.1, 13.4.1, 13.4.2, 13.4.2.c, SBMS Subject Area SMD – OPM 1.2</p>			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
<p>Are procedures documented and maintained for the identification, maintenance and disposition of OH&S records?</p> <p>Are the records legible, identifiable and traceable to the activities involved?</p> <p>Are the records stored and maintained such that they are readily retrievable and protected against damage, deterioration or loss?</p> <p>Are there specified retention times for all of the records identified?</p> <p>Are the records maintained in a manner to demonstrate conformance with the standard and appropriate to the system and the organization?</p> <p>Is consideration given to confidentiality?</p>			

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OH&S Management System Model		CHECKING AND CORRECTIVE ACTION	
ELEMENT:	4.5.4	TITLE:	Audit
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>OH&S management system audits to be carried out, in order to:</p> <ul style="list-style-type: none"> a) determine whether or not the OH&S management system: <ul style="list-style-type: none"> 1) conforms to planned arrangements for OH&S management including the requirements of this OHSAS specification; 2) has been properly implemented and maintained; and 3) is effective in meeting the organization's policy and objectives; b) review the results of previous audits; c) provide information on the results of audits to management. <p>The audit program, including any schedule, shall be based on the results of risk assessments of the organization's activities, and the results of previous audits. The audit procedures shall cover the scope, frequency, methodologies and competencies, as well as the responsibilities and requirements for conducting audits and reporting results.</p> <p>Wherever possible, audits shall be conducted by personnel independent of those having direct responsibility for the activity being examined.</p> <p>NOTE The word "independent" here does not necessarily mean external to the organization.</p>			X
<p>FACILITY IMPLEMENTATION OF STANDARD: This year OHSAS 18001 elements were reviewed for compliance to the standards. Exceptions to the standard are addressed in this report. Last years OHSAS 18001 findings and Observations were identified in the C-AD Family Tracking System (ATS) item # 3237 and track until the issues are properly closed. The NSF OHSAS Assessment and BNL Site Assessment are tracked under the BNL Institutional Tracking System (# 3307 and # 3184 respectively).</p>			
<p>EXISTING PROCEDURES AND DOCUMENTATION (LIST):</p> <p>OHSAS BNL Interim Procedures (Note: the OHSAS BNL Interim Procedures are presently being converted over to SBMS Subject Area, OPM 13.10.1, SMD- Self Assessments)</p>			
<p>COMMENTS: None</p>			
EVALUATION:			
X MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE	
<p>OPTIONAL AUDITOR QUESTIONS:</p> <p>Are procedures documented and maintained for periodic OH&S audits?</p> <p>Does the procedure for OH&S audits include the scope of the audit, frequency, methodologies used, responsibilities, requirements, and method of reporting results?</p> <p>Does the OH&S audit determine whether their OH&S has been implemented and maintained and conforms to this standard and organization's OH&S policy and objectives?</p> <p>Does the OH&S audit provide results of the audits to management?</p> <p>Is the audit program and schedule based on risk assessments and the results of previous audits?</p> <p>Does the procedure address the independence of auditors?</p>			

Brookhaven National Laboratory

OHSAS 18001 OH&S Readiness Assessment

Organization: C-AD/SMD

Date: 4/18/07

Lead Auditors: R. Savage/M. VanEssendelft

OH&S Management System Model		MANAGEMENT REVIEW	
ELEMENT:	4.6	TITLE:	Management Review
OHSAS 18001 STANDARD:		NO	PARTIAL
<p>The organization's top management shall, at intervals that it determines, review the OH&S management system, to ensure its continuing suitability, adequacy and effectiveness. The management review process shall ensure that the necessary information is collected to allow management to carry out this evaluation. This review shall be documented.</p> <p>The management review shall address the possible need for changes to policy, objectives and other elements of the OH&S management system, in the light of OH&S management system audit results, changing circumstances and the commitment to continual improvement.</p>		<input type="checkbox"/>	<input checked="" type="checkbox"/>
FACILITY IMPLEMENTATION OF STANDARD:			
C-AD/SMD Management Review was performed and documented as required by OPM 1.10.4. Targets and Objectives were identified by Management and documented in OPM 14.30 as required.			
EXISTING PROCEDURES AND DOCUMENTATION (LIST):			
OPM 1.10.4 and 14.30, C-AD/SMD Management Reviews			
COMMENTS: None			
EVALUATION:			
X	MEETS REQUIREMENT	MINOR NONCONFORMANCE	MAJOR NONCONFORMANCE
OPTIONAL AUDITOR QUESTIONS:			
Has top management performed a review of the OH&S management system on a periodic basis? Is it documented?			
Does the review address the system's:			
<ul style="list-style-type: none"> • continued suitability • adequacy • effectiveness 			
Does the review address possible need to change its policy, objectives and other elements of the OH&S management system? Has this been conducted in light of OH&S management system audit results, continual improvement and changing circumstances?			
Does the record of the review include a list of information used for the management evaluation?			